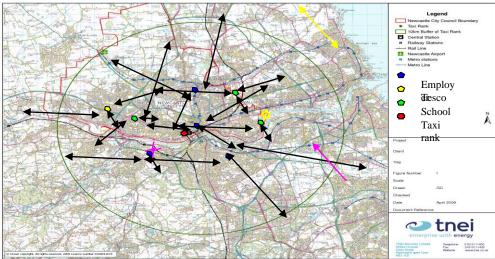


LCV Programme in the North East







EV's are part of Manufacturing & Advanced Engineering Sector



£1bn GVA p.a





























Sector split

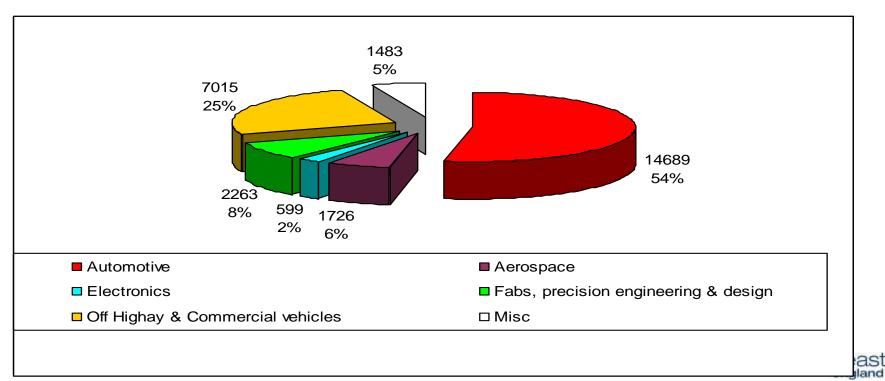


➤ Estimated 28,000 jobs in the sector within 260+ companies.

List of manu and eng companies in region Apr 07.xls

> Split into broad categories below:

Estimated % & Job Number Split



Note: Excludes Marine & Defence



ONE LCV Programme

Skills

Infrastructure

R&D

Manufacturers

Universities MSC LCV

- AMAP
- Gateshead College Service Training SEV & AA
- Centre for Electric Drives
- Centre For Design & Research Northumbria

- -Leading city
- "J" Cities
- -National spec
- -Charging roll out,
- -Commercial partnering
- -Renewable leverage Wind & PV
- DFT Vehicles Commercial Vehicles Programme

- R & D LCV Test track
- -R & D regional facilities
- -TSB & Regional fund
- -£30m over 5 years min
- Transport Operational Research Group TORG
- -Power Electronics, Drives and Machine Group
- -NAREC power distribution
- CPI, Fuel cell & Bio fuels

- -Nissan EV
- Ford / Smiths
- AVID
- -Comesys
- -Hiltech
- -Liberty
- -Cummins
- -CAT
- Komatsu
- Explorer
- Scott racing
- -Plus others









Manufacturers

- -Nissan EV
- Ford / Smiths
- AVID
- -Comesys
- -Hiltech
- -Liberty
- -Cummins
- -CAT
- Komatsu
- Explorer
- Scott racing
- -Plus others

Nissan





Optare

















AVID & Partners

LDV Vans and Minibuses



Genetic silver



Proton cars

Optare Light Public Buses





Jumbotugs



Caterpillar



Komatsu



Cummins



SEVCON



Hiltech











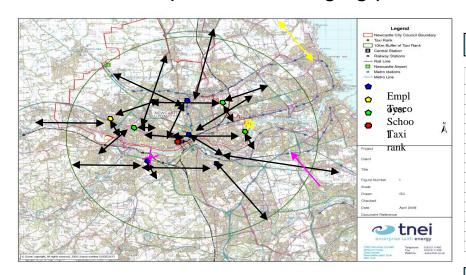
Explorer

Infrastructure

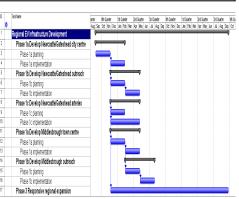
EV Hub – up to 1300 charging posts

ONE NORTH EAST

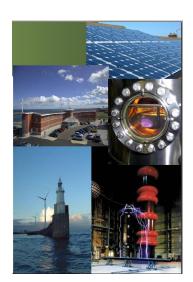
- -Leading city
- "J" Cities
- National spec
- -Charging roll out,
- -Commercial partnering
- -Renewable leverage Wind & PV
- -DFT Vehicles Commercial Vehicles **Programme**



Planned Roll Out



NAREC



- Romag



Hydrogen



TSB Demonstration

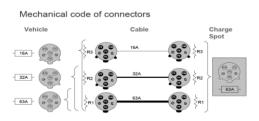


DFT Procurement



Transport Newcastle & **Gateshead Councils**

Setting the UK STD



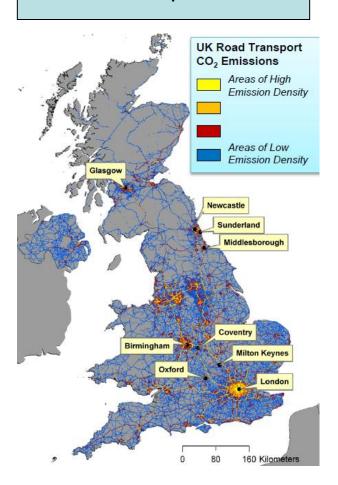
Commercial Partners



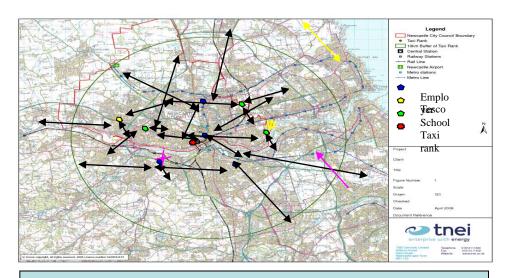
Infrastructure Update



Joined Up Cities



Regional Infrastructure – 1300 charge points 2010 /11



Plugged in Places £30m Funding



Skills

- Universities MSC LCV
- AMAP
- Gateshead College Service Training SEV & AA
- Centre for Electric Drives
- Centre For Design & Research Northumbria

Gateshead College





Apprenticeships

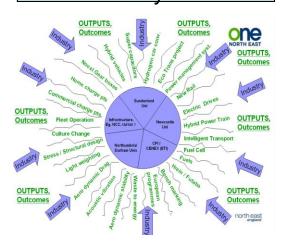




AMAP & First LCV Masters in Science



Industry Led



Centre for Electric Drives



CFDR

one



R & D

LCV R & D Test Track & Facility

ONE NORTH EAST

- R & D LCV Test track
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- -NAREC power distribution
- CPI, Fuel cell & Bio fuels

CPI – Fuel Cells & Bio Fuels



PTEC Centre





Power Electronics & Drives



TORG



AMAP



CENEX National event / Science Fest



National CENEX /OLEV 23rd – 25th March

ScienceFest 12th – 21sth March





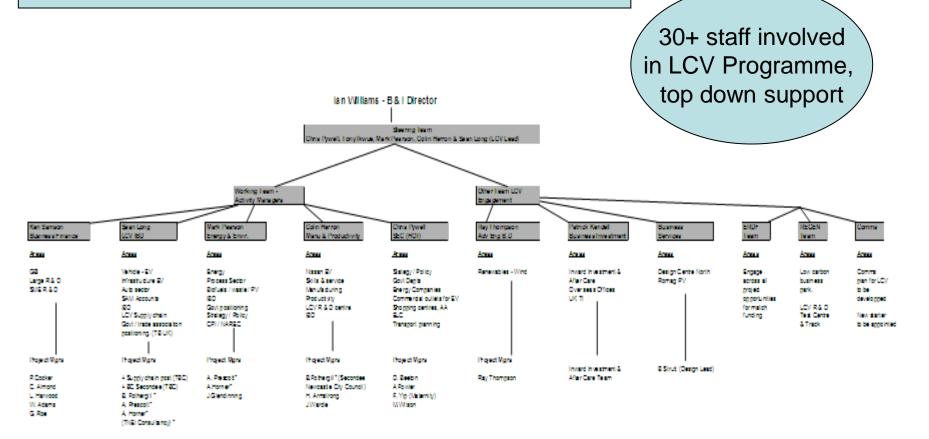
What ever you want?







ONEs' Cross Functional Team



LCV Programme & Projects



25 Projects Currently in development

LCV Programme Discigned to etimistic mass production and supply of give varie to the Public Section & number of comparises have been short listed to supply to Councils and after public sector bodies.

Budget of £30+ Million over 2 years

> **Excluding TSB** Calls to come?



Ministerial Support and Highest level of Collaboration



Gordon Brown & Lord Mandelson

Lord Mandelson at SEV

Lord Drayson supporting LCEA







Ian Lucas

Nick Brown

Dr Viv Stephens
- CENEX





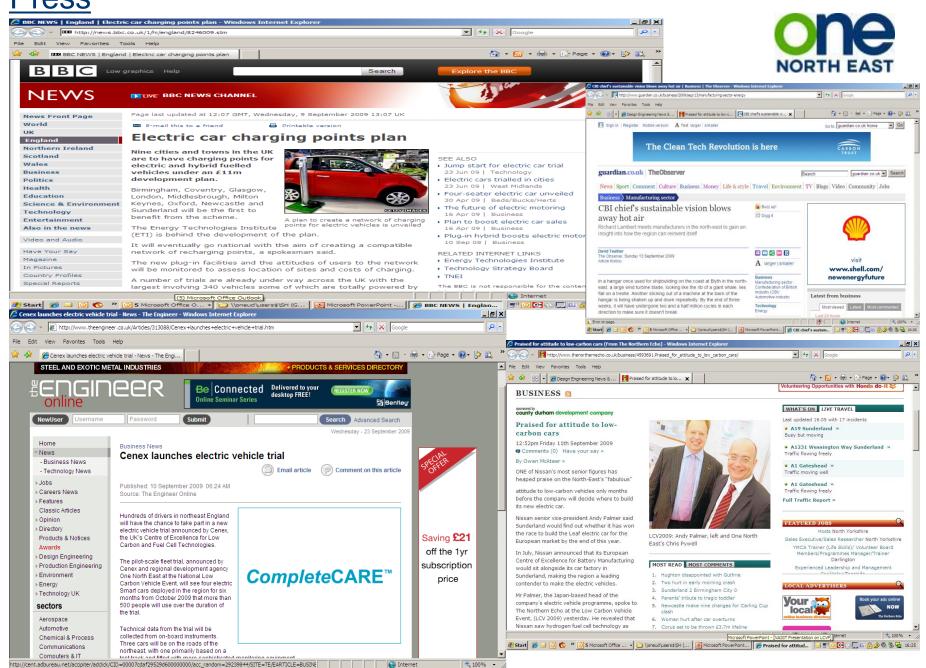






north east england

Press



🦺 Start 🥬 🔟 🧿 📞 😘 😘 Microsoft Office O... 🔻 🗀 \\operatorname{1} \operatorname{1} \

The Place to Be - LCEA



> J Cities

- http://www.telegraph.co.uk/motoring/news/6154792/Network-of-electric-car-charging-points-unveiled.html
- http://news.bbc.co.uk/1/hi/england/8246009.stm
- http://www.sunderlandecho.com/news/11m-to-drive-forward-green.5631290.jp
- http://www.nebusiness.co.uk/business-news/the-great-north-revolution/news/2009/09/09/north-s-electric-plans-accelerate-51140-24644188/

> Cenex trial

- http://www.sunderlandecho.com/news/Electric-cars-coming-to-Wearside.5636483.jp
- http://www.thenorthernecho.co.uk/business/4591430.Vehicles on trial/
- http://www.theengineer.co.uk/Articles/313088/Cenex+launches+electric+vehicle+trial.htm

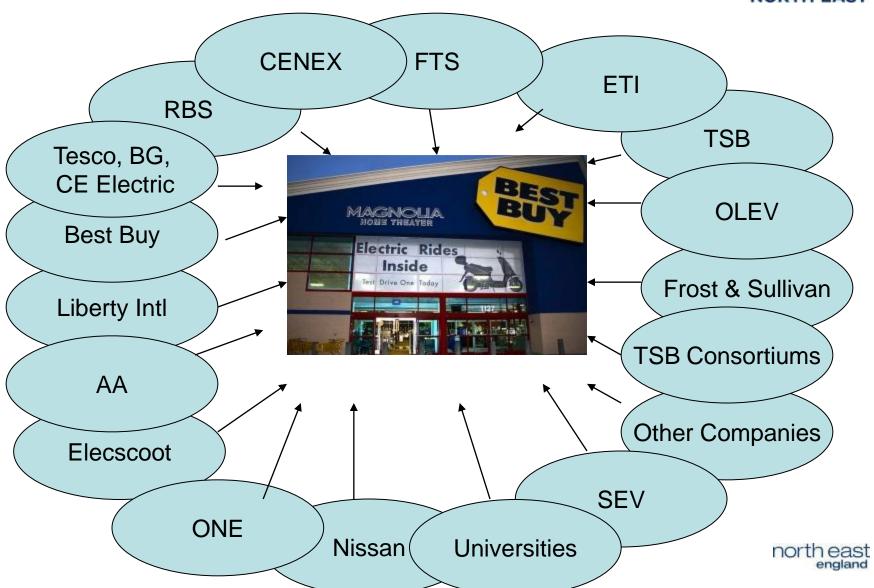
Nissan love/hydrogen

- http://www.journallive.co.uk/north-east-news/todays-news/2009/09/11/hydrogen-car-charging-plan-is-up-and-running-61634-24661199/
- http://www.sunderlandecho.com/news/NE-driving-force-in-electric.5639412.jp
- > http://www.thenorthernecho.co.uk/business/4593691.Praised for attitude to low carbon cars/
- Also for info cracking piece in the Observer about CBI boss Richard Lambert loving the North East:
- http://www.guardian.co.uk/business/2009/sep/13/manufacturing-sector-energy



EV Experience – Electric Dreams which are reality





Working with other Government Bodies and Associations





- > Ministers, MP'S & MEP's
- > BERR, Automotive Unit
- > BERR, NAIGT
- > DFT / OLEV
- > TSB
- > EPSRC
- > DIUS
- > MAS
- > ETI
- > CENEX
- > LCVP
- > UKTI and Overseas Offices
- > Other RDA's and Over Seas Offices
- > SMMT, CEA
- > NAREC, CPI
- Local Councils & Sub Regional Partnerships